

What is claimed is:

1 1. A method of uniquely identifying resources, comprising steps of:
2 modeling the resources using a hierarchical schema, wherein classes in the schema
3 correspond to resource types and wherein instances in the schema represent individual resources,
4 each instance being associated with one of the classes according to the resource type of the
5 individual resource represented by the instance; and
6 defining, at a topmost class of the hierarchical schema, a naming rule property and an
7 instance identity property, wherein:
8 each class at levels of the hierarchical schema beneath the topmost level inherits the
9 naming rule property and the instance identity property;
10 a value of the naming rule property for a selected class identifies properties of the
11 selected class that enable instances of the selected class to have unique identities; and
12 an instance of the selected class specifies the unique identity for that instance, using
13 the identified properties for the selected class.

1 2. The method according to Claim 1, further comprising the steps of:
2 creating an identity for a particular one of the resources, using the naming rule for the class
3 with which a particular instance that represents the particular resource is associated; and
4 storing the created identity as the value of the instance identity property for the particular
5 instance.

1 3. The method according to Claim 1, further comprising the step of locating a particular

2 instance that represents a particular resource using the value of the instance's identity property.

1 4. The method according to Claim 1, wherein the value of the instance identity property for a
2 selected one of the instances comprises a local identity.

1 5. The method according to Claim 4, wherein the local identity comprises a class name for the
2 class with which the instance is associated and one or more name/value pairs, wherein each
3 name/value pair comprises a property name and a value for that property name, using property
4 names specified as the value of the naming rule property for the class.

1 6. The method according to Claim 4, wherein the value of the instance identity further
2 comprises an identification of a scoping context that is required to provide uniqueness of the
3 instance identity value.

1 7. The method according to Claim 5, wherein:
2 the value of the instance identity further comprises an identification of a scoping context
3 that is required to provide uniqueness of the instance identity value; and
4 the identification of the scoping context comprises a scoping class name that identifies a
5 selected one of the classes, wherein the particular resource is unique within the selected class,
6 along with one or more name/value pairs, wherein each name/value pair comprises a scoping class
7 property name and a value for that scoping class property name, wherein the scoping class
8 property names are specified as the value of the naming rule property for the scoping class.

1 8. The method according to Claim 7, wherein the scoping class name is identified in the value
2 of the naming rule property for the class with which the instance is associated.

1 9. The method according to Claim 5, wherein the value of the instance identity further
2 comprises an identification of a root scope within which the particular resource is unique.

1 10. The method according to Claim 9, wherein the identification of the root scope comprises a
2 domain name within which the particular resource is located.

1 11. The method according to Claim 1, wherein the value of the naming rule property is
2 specified using a structured document.

1 12. The method according to Claim 1, wherein the value of the naming rule property is
2 specified using a structured markup language.

1 13. The method according to Claim 1, wherein the hierarchical schema is an object-oriented
2 schema.

1 14. The method according to Claim 1, further comprising the step of creating an identity for a
2 particular one of the resources, using the naming rule for the class with which a particular instance
3 that represents the particular resource is associated.

1 15. A system for uniquely identifying resources, comprising:
2 a hierarchical schema that models a plurality of resources, wherein classes in the schema
3 correspond to resource types and wherein instances in the schema represent individual resources,
4 each instance being associated with one of the classes according to the resource type of the
5 individual resource represented by the instance;
6 means for defining, at a topmost class of the hierarchical schema, a naming rule property
7 and an instance identity property, wherein:
8 each class at levels of the hierarchical schema beneath the topmost level inherits the
9 naming rule property and the instance identity property;
10 a value of the naming rule property for a selected class identifies properties of the
11 selected class that enable instances of the selected class to have unique identities; and
12 an instance of the selected class specifies a unique identity for that instance, using
13 the identified properties for the selected class; and
14 means for overriding the value of the naming rule property at any of the levels of the
15 hierarchical schema beneath the topmost level.

1 16. A computer program product for uniquely identifying resources, the computer program
2 product embodied on one or more computer-readable media and comprising:
3 computer readable program code means for accessing a hierarchical schema that models a
4 plurality of resources, wherein classes in the schema correspond to resource types and wherein
5 instances in the schema represent individual resources, each instance being associated with one of

6 the classes according to the resource type of the individual resource represented by the instance;

7 computer readable program code means for defining, at a topmost class of the hierarchical
8 schema, a naming rule property and an instance identity property, wherein:

9 each class at levels of the hierarchical schema beneath the topmost level inherits the
10 naming rule property and the instance identity property;

11 a value of the naming rule property for a selected class identifies properties of the
12 selected class that enable instances of the selected class to have unique identities; and

13 an instance of the selected class specifies a unique identity for that instance, using
14 the identified properties for the selected class; and

15 computer readable program code means for overriding the value of the naming rule
16 property at any of the levels of the hierarchical schema beneath the topmost level.

1 17. A method generating unique resource identities, comprising steps of:

2 determining a particular resource for which a unique resource identity is to be generated;

3 accessing a class hierarchy with which resources are modelled, thereby obtaining a class
4 definition for a class that corresponds to a resource type for the particular resource;

5 locating, in the class definition, a naming rule that specifies how identities for instances of
6 the class are to be generated; and

7 generating the identity for the particular resource using the located naming rule.